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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,660	01/29/2004	Luis Parellada Armela	05918-256001 / VGCP No.	5385
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FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER WOLLSCHLAGER, JEFFREY MICHAEL	
			ART UNIT	PAPER NUMBER
			1732	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/767,660

Applicant(s)

ARMELA ET AL.

Examiner

Jeff Wollschlager

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) 29-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

It is noted for the record that Examiner Wollschlager has assumed responsibility for this application from Examiner Eashoo.

### ***Election/Restrictions***

Applicant's election without traverse of Group I, Species A, claims 1-28, in the reply filed on January 11, 2007 is acknowledged. Claims 29-80 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of the claim is unclear as to its limiting effect. It is unclear whether the method is suggesting formation of encapsulated fibers of a female loop fastener being applied to the distal ends of the male fastener, for example, to form a composite or some other method of encapsulation. It is further unclear from where the thermoplastic resin is provided. Appropriate clarification and/or amendment to the claim is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 10-12, 15 and 18-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Aamodt et al. (U.S. 6,303,062).

Regarding claim 1, Aamodt et al. teach a method for forming a mechanical fastener comprising: providing a projection component comprising discrete projections/stems (20) of resin extending from a surface of a base/substrate (12); heating the distal ends of the stems by contacting the ends of the stems with a layer/preformed substrate (24) of extruded material and applying the layer (24) to the distal ends to bond the layer (24) and the projection/stems (Figures 1-4; col. 1, lines 48-col. 2, lines 60; col. 5, lines 25-col. 6, lines 65).

As to claim 2, Aamodt melt bond the layer to the stems (col. 3, lines 15-21) without the use of an additional adhesive.

As to claims 3-5, Aamodt et al. press the layer (24) against the distal ends with a pair of pressure rolls (col. 6, lines 55-65; col. 8, lines 14-35).

As to claim 6, Aamodt et al. disclose employing a layer with fibers. In one interpretation of the claim, these fibers are contained with the layer itself (col. 12, lines 4-11) and are further encapsulated during the applying step.

As to claim 8 and 10, Aamodt et al. disclose compressing/foreshortening the projections while applying the preformed substrate/layer (Figures 1-4). Further, the projections continue to be compressed after the layer is applied and the composite travels between the nips (56) and (58).

As to claims 11 and 12, Aamodt et al. disclose the stems include heads that extend radially in multiple directions and in more than one discrete direction (Figures 2-5).

As to claim 15, Aamodt et al. disclose the layer is selected from a variety of materials such as a thermoplastic sheet (col. 11, lines 57-col. 12, lines 11).

As to claims 18 and 19, Aamodt et al. teach the layer is made of a different material than the projections/stems (col. 11, line 30-col. 12, line 51) including materials where the layer has a higher softening point than the stems.

As to claims 20 and 21, Aamodt et al. disclose the layer is thin (e.g. 0.254 mm) relative to the substrate and stems/projections (e.g. 1.85 mm) meeting the claimed limitations (col. 12, lines 21-51).

As to claims 22-24 and 27, Aamodt et al. teach applying and bonding the layer to the distal ends of the stems in discrete zones spaced-apart from the base (Figures 1-4; col. 1, lines 48-col. 2, line 60; col. 5, lines 25-col. 6, line 65) and removing the layer from the distal ends (col. 12, lines 49-52) wherein the layer is bonded to the distal ends with molten material carried by the layer (col. 3, lines 15-21).

As to claim 25, the layer comprises pigments, silica and other materials (col. 12, lines 4-11).

As to claim 26, the step of removing the layer leaves an imprint with the resin of the distal ends (Figures 2-5). It is further noted that Aamodt et al. disclose the same claimed process steps through employment of the same claimed materials in the same claimed manner. It follows that the same claimed physical properties and effects are realized.

Claims 1-3, 7, 9, 11-15, 18, 19 and 22-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Levitt et al. (WO 01/24654).

The examiner notes that for applicant's convenience citations from Levitt et al. are provided from U.S. 6,592,800, an IDS submitted document, which contains the same subject matter as WO01/24654.

Regarding claim 1, Levitt et al. teach a method for making a mechanical fastener comprising: providing a projection component comprising discrete projections/stems of resin extending from a surface of a base (Figures 1-4); locally heating the ends of the projections with a heater (50) that causes the projections to soften/foreshorten and compressing/foreshortening the stems with a roller (44), (col. 2, lines 43-col. 3, line 55), and applying a second article/preformed substrate, such as a loop structure or other mechanical fastener, to the distal ends to bond the second article to the projection component (col. 9, lines 18-40).

As to claim 2, Levitt et al. teach the stems are made of resin, such as polypropylene (col. 5, lines 48-67) and the second article is bonded to the stems without an adhesive (col. 9, lines 18-40).

As to claim 3, the attachment of the second article to the distal ends would be completed by some degree of pressing.

As to claims 7, 13 and 14, Levitt et al. heat the distal ends with a radiant non-contact heater (50) (col. 5, lines 10-67). The second article is not heated (col. 9, lines 18-40).

As to claim 9, the foreshortening/deforming/compressing of the projections occurs before the second article is applied (Figures 1-4, (50)).

As to claims 11 and 12, Levitt et al. form projections including heads that extend radially in multiple direction and in more than one discrete location (Figures 3 and 4).

As to claim 15, Levitt et al. disclose the second article can be various items including attachment to itself (col. 9, lines 18-col. 10, lines 7).

As to claims 18 and 19, Levitt et al. disclose the second article can be various items including materials different than the projections. It is further noted that some of the disclosed articles would routinely have a higher softening point than the disclosed stems (col. 9, lines 18-67).

As to claims 22-27, Levitt et al. disclose bonding the second article to itself, the engaging stems of other fasteners or to a loop structure and that the materials are chosen from a wide variety of materials and articles (col. 9, lines 23 - col. 10, line 7).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levitt et al. (WO 01/24654) as applied to claims 1-3, 7, 9, 11-15, 18, 19 and 22-27 above.

As to claim 4, Levitt et al. teach the method of claim 3 above but do not expressly disclose the pressure applied. However, the pressure applied to cause the preformed substrate to bond to the distal ends would have been readily optimized as is routinely practiced in the art depending on the shape and spacing of the heads and the required degree of bonding between the articles.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levitt et al. (WO 01/24654) as applied to claims 1-3, 7, 9, 11-15, 18, 19 and 22-27 above in view of any of Shepard et al. (US 2003/0074768) or Tuman et al. (US 7,014,906) or Seth et al. (U.S. 2005/0136213).



As to claim 6, Levitt et al. disclose the method of claim 1 as set forth above. Levitt et al. do not teach encapsulating fiber with thermoplastic resin. However, each of Shepard (paragraph [0011]), Tuman et al. (Figures 6 and 11) and Seth et al. (Figure 1 and 3) individually teach or suggest the claim limitations, as currently understood, in various ways when combined with Levitt et al.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to combine the teaching of Levitt et al. of combining a fastener with a second article and to combine it with the materials/articles disclosed by any of Shepard, Tuman et al. or Seth et al. for the purpose of producing a desired final product with desired properties as is routinely practiced.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aamodt et al. (U.S. 6,303,062) as applied to claims 1-6, 8, 10-12, 15 and 18-27 above, in view of Provost et al. (U.S. 5,953,797).

As to claims 16 and 17, Aamodt et al. teach the method of claim 1 as set forth above to form projections integrally molded with the base, but does not expressly state how the material from roll (50) was produced. However, Provost et al. disclose a method of producing a fastener by the claimed process (Figure 6) to produce projections integrally molded with the base.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to produce the starting material (50) disclosed by Aamodt et al. by the method disclosed by Provost et al. for the purpose of

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producing the material with conventional equipment in an economically viable manner as is routinely practiced in the art.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levitt et al. (WO 01/24654) as applied to as applied to claims 1-3, 7, 9, 11-15, 18, 19 and 22-27 above, in view of Torigo et al. (U.S. 5,611,122).

The examiner notes that for applicant's convenience citations from Levitt et al. are provided from U.S. 6,592,800, an IDS submitted document, which contains the same subject matter as WO01/24654.

As to claim 28, Levitt et al. teach the method of claim 1 as set forth above and further teach bonding the fastener produced to itself or engaging stems of another fastener (col. 9, lines 18-41) but do not teach contacting the base with the preformed substrate. However, Torigo et al. disclose or suggest that when bonding a fastener to itself or the engaging stems of another fastener that it is known to bond them in such a way as to contact the base with the substrate (Figure 5).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to modify the teaching of Levitt et al. of bonding the produced article to itself or to engaging stems of another fastener and to to bond them in such a way as to contact the base with the substrate as disclosed by Torigo et al. for the purpose of providing the required bond strength and for the purpose disclosed by Torigo et al. of eliminating noise when separating the articles (col. 1, line 60-col. 2. line 36).

**Conclusion**

All claims are rejected.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager  
Examiner  
Art Unit 1732  
March 20, 2007

  
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SUPERVISORY PATENT EXAMINER  
3/24/07